

ABSTRACT OF THE DISCLOSURE

A method for testing upgrades and modifications to a first transmission network by providing a second internet transmission network including components that duplicate or simulate one or more of the components of the first network. The second network duplicates the functionality and configuration of the first network thereby permitting modifications to be installed and tested on the second network prior to installing them on the first transmission network. This in turn allows "bugs" to be found and eliminated before modifications are used on the first network. The invention also allows error signals to be injected to enable operators to compensate for and to avoid these errors before they appear on the first network.